

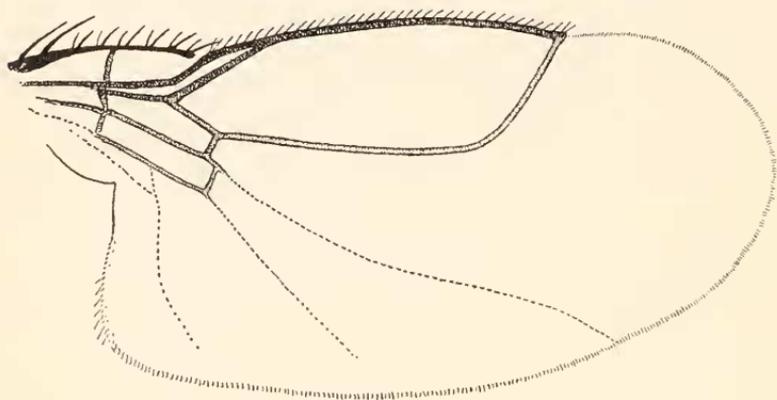
## A Borborid from an Epiphytic Bromeliad (Diptera ; fam. Borboridae).

By FREDERICK KNAB and J. R. MALLOCH,  
Bureau of Entomology, Washington, D. C.

For some time it has been known that certain Bromeliaceae, growing upon the branches of forest trees in tropical America, hold water at the bases of their leaves and that this water forms the habitat of a considerable number of insects, mostly in the larval stage. During his investigations of mosquitoes in tropical America the senior author naturally gave all possible attention to these plants, for they harbor the larvae of a considerable number of species of Culicidae which are restricted to this habitat. It was soon found that, besides the culicid larvae, larvae of a number of other families of Diptera were present, as well as the aquatic larvae of certain Coleoptera and the larvae of a species of Odonata. All these are confined to this habitat. Aside from these many other arthropods, including Myriapoda and many Arachnida, were found to frequent these epiphytic bromeliads, some of them feeding upon the tissues of the plant itself, others upon the vegetable and other debris which collects among the leaves of the bromeliad, and still others in a predaceous capacity or merely to obtain shelter.

On his last visit to Córdoba, Mexico, 1907-1908, the senior author found a group of bromeliads growing well up on a mango tree, perhaps fifty feet from the ground. These were removed and carefully lowered (no small task, on account of the uncertain footing, the weight of the plants and their spiny leaves) and afterwards examined for animals, of which a great variety were obtained. Among other insects breeding in the vegetable debris (kept moist by the water at the bases of the leaves) was the species of *Limosina* here described. While many of the Borboridae are scavengers, and therefore likely to turn up under a variety of circumstances, others have specialized habits. We believe that the present species will prove to be peculiar to the habitat from which it was obtained. As compared with the ordinary scavenger forms

it shows much specialization structurally, particularly in the wing venation with its short costa and the concentration of the veins towards the base of the wing. In this respect it even exceeds *Limosina perparva*, described by Williston from the island of St. Vincent, and which may prove to have similar habits.



Wing of *Limosina bromeliarum* K. and M., n. sp.

#### *Limosina bromeliarum* n. sp.

Male and female: Black, subshining; frons opaque except on stripes on which frontal bristles are situated, the central rows nearly parallel and not strongly incurved; face very distinctly produced, shining, concave in centre, one large and 3-4 smaller bristles on cheeks close to mouth edge, jowls bare; second antennal joint with numerous bristles and nearly as long as the somewhat triangular third joint, arista twice as long as breadth of frons, very thin, with long pubescence; dorsum of thorax with regular rows (10) of short bristles, one pair of prescutellar dorsal and one much weaker and widely separated pair of dorso-central bristles; scutellum with four marginal bristles; abdomen short and broad, especially in ♂, the second segment elongated in both sexes, numerous strong lateral hairs in both sexes, ♂ hypopygium large, slightly asymmetrical, with a large central depression and numerous short hairs; legs piceous, fore femora with a series of bristles on ventral surface, the apical three of which are strongest, fore tibiae slightly dilated towards apex covered with short hairs, basal joint of fore tarsi nearly as long as next three, mid tibiae with a regular series of three bristles nearly on the dorsal surface and one on postero-dorsal surface at same length from apex as lowest of the other three, hind femora with two

preapical ventral bristles, hind tibiæ dilated towards apices, with numerous short hairs but no distinct bristles, basal joint of hind tarsus distinctly thicker and shorter than second joint; wings yellowish, costa very much short of apex of wing, first section longer than second, second nearly twice as long as sections 1 to 3, third longitudinal vein very obtusely bent at turn and joining costa at nearly a right angle, costa not extending beyond end of third vein, both cross veins very close together, fourth vein obsolete beyond cross vein, fifth barely traceable; halteres brown. Length  $\frac{1}{2}$ - $\frac{3}{4}$  mm.

Resembles in some particulars *perparva* Will., but very different in venation of wings. Seven specimens, males and females, reared from arboreal bromeliads, March 17-21, 1908.

Córdoba, Mexico. (F. Knab).

Type.—Cat. No. 14,913, U. S. Nat. Mus.

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## A Bromeliad-Inhabiting Crane-fly (Tipulidae, Dipt.)

By CHAS. P. ALEXANDER, Ithaca, N. Y.\*

To the rather long list of inhabitants of the Neotropical epiphytic, water-bearing Bromeliaceous plants, (as given by Dr. Calvert in ENTOMOLOGICAL NEWS, Nov., 1911, pp. 402-411), there should be added the family *Tipulidae*. I have recently received specimens of a Costa Rican *Mongoma* that were bred from Bromeliads by Sr. C. Picado. I am indebted to Mr. Frederick Knab, of the U. S. National Museum, for the privilege of examining these specimens.

### *Mongoma bromeliadicola* sp. n.

Brown; thorax indistinctly striped; femora with a subapical black ring; apices of femora and tibiæ and bases of the tibiæ, white.

Length, ♂, 7.4 mm.; ♀, 8.4-9.2 mm.

Wing, ♂, 7.6 mm.; ♀, 8.5-9.2 mm.

Legs all detached and almost impossible to separate; femora, 8.4-9.8 mm.; tibia, 7.6-10.1 mm.; tarsus, 7.2-8.9 mm. What is probably the fore-leg measures, femora, 8.4 mm.; tibia, 10.1 mm.; tarsus, 8.9 mm. Middle leg: supp. 9-9 mm., tibia 7.6-8.1 mm., tarsus 7.2-7.3 mm. Hind leg, supp., femora 9.6-9.8 mm., tibia 9.8-9.4 mm.

Head: rostrum and palpi yellowish-brown; antennæ dark brown the basal segments rather paler; front vertex and occiput light brown-

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\*Contribution from the Entomological Laboratory of Cornell University.